

IEA/OLC(95)191

Paris, 30 October 1995

To:

**All Contracting Parties to the Implementing
Agreement for Co-operation on Technologies and
Programmes for Demand-Side Management**

Dear Sirs,

Certified and Conformed Copies

You will find enclosed a conformed copy of the Implementing Agreement for Co-operation on Technologies and Programmes for Demand-Side Management certified as at 30 October 1995 by the Legal Counsel of the Agency. The original of the Implementing Agreement remains on deposit with the Executive Director of the Agency.

Nine additional conformed (uncertified) copies are also enclosed for your convenience. Additional conformed copies will be made available upon request.

In accordance with Article 14(f) of the Implementing Agreement, conformed copies are being furnished also to all Agency Participating Countries, to each Member country of the Organisation for Economic Co-operation and Development and to the European Communities.

Sincerely yours,



Craig Bamberger
Legal Counsel

INTERNATIONAL ENERGY AGENCY

IMPLEMENTING AGREEMENT

FOR CO-OPERATION
ON TECHNOLOGIES AND PROGRAMMES
FOR DEMAND-SIDE MANAGEMENT

INTERNATIONAL ENERGY AGENCY

IMPLEMENTING AGREEMENT

FOR CO-OPERATION ON

TECHNOLOGIES AND PROGRAMMES

FOR DEMAND-SIDE MANAGEMENT

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INTERNATIONAL ENERGY AGENCY

IMPLEMENTING AGREEMENT
FOR CO-OPERATION
ON TECHNOLOGIES AND PROGRAMMES
FOR DEMAND-SIDE MANAGEMENT

The Contracting Parties

CONSIDERING that the Contracting Parties, being either governments of International Energy Agency ("Agency") countries, parties designated by their respective governments, or the European Communities wish to take part in the establishment and operation of a Co-operative Programme on Technologies and Programmes for Demand-Side Management (the "Programme") as provided in this Agreement, and to hold open to non-Members of the Agency or their designees the opportunity to participate in the Programme as Associate Contracting Parties;

CONSIDERING that the governments of Agency countries have agreed in Article 41 of the Agreement on an International Energy Program (the "I.E.P. Agreement") to undertake national programmes in the areas set out in Article 42 of the I.E.P. Agreement, including energy research and development, and have agreed in Chapter IV of the Long-Term Co-operation Programme, adopted by the Governing Board of the Agency on 30th January, 1976, to undertake co-operative activities including jointly financed programmes and projects in energy research and development;

CONSIDERING that the Governing Board of the Agency on 15th March, 1993 approved the Programme as a special activity under Article 65 of the I.E.P. Agreement;

CONSIDERING that the Agency has recognized the establishment of the Programme as an important component of international co-operation in the field of energy research and development;

HAVE AGREED as follows:

Article 1

OBJECTIVES

(a) *Scope of Activity.* The Programme to be carried out by the Contracting Parties within the framework of this Agreement shall consist of information exchange on technologies and programmes for demand-side management (DSM), co-operative support for development and demonstration of DSM technologies, investigation of techniques for implementation of demand-side technologies in the marketplace, and development of improved methods for incorporating demand-side options into resource planning. For the purposes of this Agreement, demand-side management is defined to include load management, strategic conservation, and related activities carried out by utilities. By means of the co-operative activity envisioned, Participants hope to help demand-side technologies reach their full market potential, thereby allowing energy systems to function more effectively and giving utility investments enhanced value for gas and electricity customers.

(b) *Method of Implementation.* The Contracting Parties shall implement the Programme by undertaking one or more tasks (the "Task" or "Tasks") each of which will be open to participation by two or more Contracting Parties as provided in Article 2 hereof. The Contracting Parties which participate in a particular Task are, for the purposes of that Task, referred to in this Agreement as "Participants".

(c) *Task Co-ordination and Co-operation.* The Contracting Parties shall co-operate in co-ordinating the work of the Task and shall endeavour, on the basis of an appropriate sharing of burdens and benefits, to encourage co-operation among Participants engaged in the Tasks with the objective of advancing the state of understanding of all Contracting Parties in the field of demand-side management.

Article 2

IDENTIFICATION AND INITIATION OF TASKS

(a) *Initial Task.* A Contracting Party may become a Participant in any Task identified in the Annexes hereto; such participation shall become effective upon the Contracting Party's giving the Executive Director of the Agency a written Notice of Participation in the appropriate Task Annex. Each Annex which is identified in the Annexes hereto at the time of the coming into force of this Agreement shall enter into force at such time as the Executive Committee, acting by unanimity of those Contracting Parties which have communicated to the Executive Director a Notice of Participation in that Annex, decides that there is sufficient participation to perform the Task.

(b) *Initiation of Additional Tasks.* Additional Tasks may be initiated by any Contracting Party according to the following procedure:

- (1) Whenever two or more Contracting Parties agree to undertake a new Task, they shall submit to the Executive Committee for adoption a draft Annex, similar in form to the Annexes attached hereto, containing a description of the scope of work and conditions of the Task proposed to be performed; the adopted Annex shall become part of this Agreement;
- (2) The participation in the adopted Annex of any Contracting Parties identified therein shall become effective upon the Contracting Party's giving the Executive Director of the Agency a written Notice of Participation in that Annex. Article 12(d) shall apply for any Contracting Party that wishes to become a Participant in any Task after the respective Annex has been adopted by the Executive Committee;
- (3) In carrying out the various Tasks, the Participants shall co-ordinate their activities in order to avoid duplication of activities.

(c) *Application of Task Annexes.* Each Annex shall be binding only upon the Participants therein and upon the Operating Agent for that Task, and shall not affect the rights or obligations of other Contracting Parties.

(d) *Entry of Annexes into Force.* Each Annex shall enter into force at such time as the Executive Committee, acting by unanimity, determines that there is sufficient participation to perform the Task, taking account of both cost-sharing and task-sharing elements of the Annex. It shall then remain in force for the term specified in the Annex, but not exceeding the term of the Agreement.

Article 3

THE EXECUTIVE COMMITTEE

(a) *Supervisory Control.* Control of the Programme shall be vested in the Executive Committee constituted under this Article.

(b) *Membership.* The Executive Committee shall consist of one member designated by each Contracting Party; each Contracting Party shall also designate an alternate member to serve on the Executive Committee in the event that its designated member is unable to do so.

(c) *Responsibilities.* The Executive Committee shall:

- (1) Adopt for each year, acting by unanimity, the Programme of Work and Budget, if foreseen, for each Task, together with an indicative programme of work and budget for the following two years; the Executive Committee may, as required, make adjustments within the framework of the Programme of Work and Budget;

- (2) Make such rules and regulations as may be required for the sound management of the Tasks, including financial rules as provided in Article 6 hereof;
- (3) Carry out the other functions conferred upon it by this Agreement and the Annexes hereto;
- (4) Notify the IEA Secretariat of the intention to invite any representative from any country that is not a member of the Agency to any workshop, conference, meeting or similar event under the Programme, written notice of such intention to be given sufficiently in advance of the event to permit appropriate consultations and approval action to be taken within the Agency; and
- (5) Consider any matters submitted to it by any of the Operating Agents or by any Contracting Party.

(d) *Procedures.* The Executive Committee shall carry out its responsibilities in accordance with the following procedures:

- (1) The Executive Committee shall each year elect a Chairman and one or more Vice-Chairmen;
- (2) The Executive Committee may establish such subsidiary bodies and rules of procedure as are required for its proper functioning;
- (3) A representative of the Agency and a representative of each Operating Agent (in its capacity as such) may attend meetings of the Executive Committee and its subsidiary bodies in an advisory capacity;
- (4) The Executive Committee shall meet in regular session not more than twice each year; a special meeting shall be convened upon the request of any Contracting Party which can demonstrate the need therefor;
- (5) Meetings of the Executive Committee shall be held at such time and in such office or offices as may be designated by the Committee;
- (6) At least twenty-eight days before each meeting of the Executive Committee, notice of the time, place and purpose of the meeting shall be given to each Contracting Party and to other persons or entities entitled to attend the meeting; notice need not be given to any person or entity otherwise entitled thereto if notice is waived before or after the meeting;
- (7) The quorum for the transaction of business in meetings of the Executive Committee shall be one-half of the members plus one (less any resulting fraction) provided that any action relating to a particular Task shall require a quorum as aforesaid of members or alternate members designated by the Participants in that Task;
- (8) The Executive Committee shall ensure that minutes of each meeting are

Article 4

THE SECRETARY

(a) *Designation; Scope of Authority.* The Executive Committee, acting by unanimity, may designate a secretary (the "Secretary") to:

- (1) Make and distribute agendas, Minutes and other documents of Executive Committee meetings;
- (2) Prepare decisions and recommendations in accordance with Article 3(e)(5) above;
- (3) Assist the Executive Committee and its Chairman in carrying out their responsibilities under Articles 3(c)(3), 3(d)(8), 3(e)5, 3(f) and 14(d) of this Agreement;
- (4) Assist the Executive Committee in the overall co-ordination of the work in the different Annexes; and
- (5) Undertake such other activities as may be required by the Executive Committee to assist it in carrying out its responsibilities under this Agreement.

The Secretary shall carry out its functions under the supervision of the Executive Committee. Representatives of the Secretary may attend meetings of the Executive Committee and its subsidiary bodies in an advisory capacity with no voting rights.

(b) *Reimbursement of Costs.* The Executive Committee may provide that expenses and costs incurred by the Secretary under this Article be reimbursed to the Secretary from the common fund which the Executive Committee may establish under the first sentence of Article 6(b) below.

(c) *Contracting.* The Secretary may, with the prior approval of the Executive Committee acting by unanimity and in accordance with the Programme of Work and Budget, enter into contracts for necessary and appropriate support or consultancy services.

(d) *Replacement.* Should the Executive Committee wish to replace the Secretary with another entity, the Executive Committee may, acting by unanimity, take such action.

(e) *Resignation.* The Secretary shall have the right to resign at any time by giving six months written notice to that effect to the Executive Committee.

(f) *Information and Report.* The Secretary shall furnish the Executive Committee with such information concerning its work as the Executive Committee may request.

distributed promptly after the meeting to each person or entity entitled to attend the meeting.

(e) *Voting.*

- (1) When the Executive Committee adopts a decision or recommendation for or concerning a particular Task, the Executive Committee shall act:
 - (i) When unanimity is required under this Agreement: by unanimous agreement of those members or alternate members which were designated by the Participants in that Task and which are present and voting;
 - (ii) When no express voting provision is made in this Agreement: by majority vote of those members or alternate members which were designated by the Participants in that Task and which are present and voting.
- (2) In all other cases in which this Agreement expressly requires the Executive Committee to act by unanimity, this shall require the unanimous agreement of each member or alternate member present and voting, and in respect of all other decisions and recommendations for which no express voting provision is made in this Agreement, the Executive Committee shall act by a majority vote of the members or alternate members present and voting.
- (3) If a government has designated more than one Contracting Party to this Agreement, those Contracting Parties together may cast only one vote under this paragraph.
- (4) The decisions and recommendations referred to in sub-paragraphs (1) and (2) above may, with the agreement of each member or alternate member entitled to act thereon, be made by mail, telefax, telex, cable or other means of electronic transmission without the necessity for calling a meeting. Such action shall be taken by unanimity or majority of such members as in a meeting. The Chairman of the Executive Committee shall ensure that all members are informed of each decision or recommendation made pursuant to this sub-paragraph.

(f) *Reports.* The Executive Committee shall, by 31st January each year, provide the Agency with 30 copies of reports containing technically substantive, non-proprietary information on the progress of the Programme and its results.

Article 5

THE OPERATING AGENTS

(a) *Designation.* Participants shall designate in the relevant Annex an Operating Agent for each Task. References in this Agreement to the Operating Agent shall apply to each Operating Agent in respect of the Task for which it is responsible.

(b) *Scope of Authority to Act on Behalf of Participants.* Subject to the provisions of the applicable Annex:

- (1) All legal acts required to carry out each Task shall be performed on behalf of the Participants by the Operating Agent for the Task;
- (2) The Operating Agent shall hold, for the benefit of the Participants, the legal title to all property rights which may accrue to or be acquired for the Task.

The Operating Agent shall operate the Task under its supervision and responsibility, subject to this Agreement, in accordance with the law of the country of the Operating Agent.

(c) *Specific Responsibilities.* The Operating Agent for each Annex shall be responsible for the overall technical and administrative management of the work under that Annex and for implementing the decisions of the Executive Committee. To this end, the Operating Agent for each Annex shall:

- (1) Prepare and submit annual reports to the Executive Committee on progress made on work under the Annex;
- (2) Upon request of the Executive Committee, convene annual meetings to be attended by all Participants in the Task, as well as meetings of working groups, where necessary, the cost of which will be borne by the Participants.

(d) *Reimbursement of Costs.* The Executive Committee may provide that expenses and costs incurred by an Operating Agent in acting as such pursuant to this Agreement shall be reimbursed to the Operating Agent from funds made available by the Participants pursuant to Article 7 hereof.

(e) *Replacement.* Should the Executive Committee wish to replace an Operating Agent with another government or entity, the Executive Committee may, acting by unanimity and with the consent of such government or entity, replace the initial Operating Agent. References in this Agreement to the "Operating Agent" shall include any government or entity appointed to replace the original Operating Agent under this paragraph.

(f) *Resignation.* An Operating Agent shall have the right to resign at any time by giving six months written notice to that effect to the Executive Committee, provided that:

- (1) A Participant, or entity designated by a Participant, is at such time willing to assume the duties and obligations of the Operating Agent and so notifies the Executive Committee and the other Participants to that effect, in writing, not less than three months in advance of the effective date of such resignation; and
- (2) Such Participant or entity is approved in its function of Operating Agent by the Executive Committee, acting by unanimity.

(g) *Accounting.* An Operating Agent which is replaced or which resigns as Operating Agent shall, not later than three months after such replacement or resignation takes effect, provide the Executive Committee with an accounting of any monies and other assets which it may have collected or acquired for the Task in the course of carrying out its responsibilities as Operating Agent and shall transfer those monies and other assets to the replacement Operating Agent as soon as possible after the delivery of the accounts.

(h) *Transfer of Rights.* In the event that another Operating Agent is appointed under paragraph (e) or (f) above, the Operating Agent shall transfer to such replacement Operating Agent any property rights which it may hold on behalf of the Task.

(i) *Information and Reports.* Each Operating Agent shall furnish to the Executive Committee such information concerning the Task as the Committee may request and shall each year submit, not later than two months after the end of the financial year, a report on the status of the Task.

Article 6

ADMINISTRATION AND STAFF

(a) *Administration of Tasks.* Each Operating Agent shall be responsible to the Executive Committee for implementing its designated Task in accordance with this Agreement, the applicable Task Annex, and the decisions of the Executive Committee.

(b) *Staff.* It shall be the responsibility of the Operating Agent to retain such staff as may be required to carry out its designated Task in accordance with rules determined by the Executive Committee. The Operating Agent may also, as required, utilize the services of personnel employed by other Participants (or organizations or other entities designated by Contracting Parties) and made available to the Operating Agent by secondment or otherwise. Such personnel shall be remunerated by their respective employers and shall, except as provided by the Executive Committee, be subject to their employers' conditions of service. The Contracting Parties shall be entitled to claim the appropriate cost of such remuneration or to receive an appropriate credit for such cost as part of the Budget of the Task, in accordance with Article 7(f)(6) hereof.

Article 7

FINANCE

(a) *Individual Financial Obligations.* Each Contracting Party shall bear the costs it incurs in carrying out this Agreement, including the costs of formulating or transmitting reports and of reimbursing its employees for travel and other per diem expenses incurred in connection with work carried out on the respective Tasks, unless provision is made for such costs to be reimbursed from common funds as provided in paragraph (h) below.

(b) *Common Financial Obligations.* The Executive Committee may agree, acting by unanimity, to establish a common fund to share the costs of its responsibilities and administrative activities set forth under Article 3 hereof. In addition, Participants wishing to share the costs of a particular Task shall agree in the appropriate Task Annex to establish a separate common fund. The apportionment of contributions to such common funds (whether in the form of cash, services rendered, intellectual property or the supply of materials) as well as the management and use of such common funds shall be governed by the regulations and decisions made pursuant to this Article by the Executive Committee, acting by unanimity.

(c) *Financial Rules, Expenditure.* The Executive Committee, acting by unanimity, may make such regulations as are required for the sound financial management of each Task including, where necessary:

- (1) Establishment of budgetary and procurement procedures to be used by the Operating Agent in making payments from any common funds which may be maintained by Participants for the account of the Task or in making contracts on behalf of the Participants;
- (2) Establishment of minimum levels of expenditure for which Executive Committee approval shall be required, including expenditure involving payment of monies to the Operating Agent for other than routine salary and administrative expenses previously approved by the Executive Committee in the budget process.

In the expenditure of common funds, the Operating Agent shall take into account the necessity of ensuring a fair distribution of such expenditure in the Participants' countries, where this is fully compatible with the most efficient technical and financial management of the Task.

(d) *Crediting of Income to Budget.* Any income which accrues from a Task shall be credited to the Budget of that Task.

(e) *Accounting.* The system of accounts employed by the Operating Agent shall conform to accounting principles generally accepted in the country of the Operating Agent and shall be consistently applied.

(f) *Programme of Work and Budget, Keeping of Accounts.* Should Participants agree to maintain common funds for the payment of obligations under a programme of work and budget of the Task, the following provisions shall be applicable unless the Executive Committee, acting by unanimity, decides otherwise:

- (1) The financial year of the Task shall correspond to the financial year of the Operating Agent;
- (2) The Operating Agent shall each year prepare and submit to the Executive Committee for approval a draft programme of work and budget, together with an indicative programme of work and budget for the following two years, not later than three months before the beginning of each financial year; the Executive Committee shall then transmit the final programme, once approved, to the Agency and to the members of the Committee on Energy Research and Technology of the Agency;
- (3) The Operating Agent shall maintain complete and separate financial records which shall clearly account for all funds and property coming into the custody or possession of the Operating Agent in connection with the Task;
- (4) Not later than three months after the close of each financial year the Operating Agent shall submit to auditors selected by the Executive Committee for audit the annual accounts maintained for the Task; upon completion of the annual audit, the Operating Agent shall present the accounts together with the auditors' report to the Executive Committee for approval;
- (5) All books of account and records maintained by the Operating Agent for the Task shall be preserved for at least three years from the date of termination of the Task;
- (6) Where provided in the relevant Annex, a Participant supplying services, materials or intellectual property to the Task shall be entitled to a credit, determined by the Executive Committee, acting by unanimity, against its contribution (or to compensation, if the value of such services, materials or intellectual property exceeds the amount of the Participant's contribution); such credits for services of staff shall be calculated on an agreed scale approved by the Executive Committee and shall include all payroll-related costs.

(g) *Currency of Contributions.* Contributions due hereunder from the Contracting Parties shall be paid in the currency of the Operating Agent, unless another currency is specified by the Operating Agent in agreement with the Executive Committee for the purpose of meeting a commitment in that currency.

(h) *Contribution to Common Funds.* Should Participants agree to establish common funds under the annual Programme of Work and Budget for a Task, any financial contributions due

from Participants in a Task shall be paid to the Operating Agent in the currency of the country of the Operating Agent at such times and upon such other conditions as the Executive Committee, acting by unanimity, shall determine, provided, however, that:

- (1) Contributions received by the Operating Agent shall be used solely in accordance with the Programme of Work and Budget for the Task;
 - (2) The Operating Agent shall be under no obligation to carry out any work on the Task until contributions amounting to at least fifty per cent (in cash terms) of the total due at any one time have been received.
- (i) *Ancillary Services.* Ancillary services may, as agreed between the Executive Committee and the Operating Agent, be provided by that Operating Agent for the operation of a Task and the cost of such services, including overheads connected therewith, may be met from budgeted funds of that Task.
- (j) *Taxes.* The Operating Agent shall pay all taxes and similar impositions (other than taxes on income) imposed by national or local governments and incurred by it in connection with a Task, as expenditure incurred in the operation of that Task under the Budget; the Operating Agent shall, however, endeavour to obtain all possible exemptions from such taxes.
- (k) *Audit.* Each Participant shall have the right, at its sole cost, to audit the accounts of any work in a Task for which common funds are maintained, on the following terms:
- (1) The Operating Agent shall provide the other Participants with an opportunity to participate in such audits on a cost-shared basis;
 - (2) Accounts and records relating to activities of the Operating Agent other than those conducted for the Task shall be excluded from such audit, but if the Participant concerned requires verification of charges to the Budget representing services rendered to the Task by the Operating Agent, it may, at its own cost, request and obtain an audit certificate in this respect from the auditors of the Operating Agent;
 - (3) Not more than one such audit shall be required in any financial year;
 - (4) Any such audit shall be carried out by not more than three representatives of the Participants.

Article 8

PROCUREMENT PROCEDURES

All procurement of equipment and material shall be in accordance with the procedures laid down by the Executive Committee under Article 7(c)(1) hereof, which shall provide, inter alia:

- (1) The Operating Agent of each Annex shall have the power to enter into agreements and contracts for all necessary support, design and developmental services, and material fabrication and facility construction activities in the interest of the Annex, provided that such agreements and contracts are authorized in an approved Budget or by the provisions of this Agreement or by the express authority of the Executive Committee;
- (2) No Operating Agent shall enter into any agreement for a total value of more than US \$10,000 without the approval of the Executive Committee;
- (3) The Operating Agent for each Annex shall perform all procurement functions that may be necessary to carry out activities under the Annex, in accordance with the procurement procedures adopted by the Executive Committee pursuant to Article 7(c)(1) hereof;
- (4) Consistent with the aforementioned procurement procedures, the Operating Agent shall undertake to secure the best contractual terms and conditions available; including, where possible, provision for title to all intellectual property generated under the Agreement, for a royalty-free licence for the use of background intellectual property for the purposes of the Task alone, and for a right on reasonable terms and conditions in accordance with Article 9 hereof for the Contracting Parties to use such background intellectual property commercially.

Article 9

INFORMATION AND INTELLECTUAL PROPERTY

(a) *Application to Agreement and Annexes.* Pursuant to the General Guidelines Concerning Information and Intellectual Property, approved by the Governing Board of the Agency on 21st November, 1975, and any modification thereof, the following information and intellectual property provisions shall generally apply to this Agreement and each of its constituent Annexes. Exceptions and additions to these provisions may be made in any particular Annex, in which case they shall apply to that Annex alone.

(b) *Executive Committee's Powers.* The publication, distribution, handling, protection and ownership of information and intellectual property provided under or arising from each Annex shall be determined by the Executive Committee, acting by unanimity, in conformity with this Agreement and the laws of the countries of the Participants.

(c) *Proprietary Information.* The Operating Agent and the Participants shall take all necessary measures in accordance with this Article, the laws of their respective countries, and international law to protect proprietary information. For the purposes of this Article, proprietary information shall mean information of a confidential nature such as trade secrets and know-how (for example, computer programmes, design procedures and techniques,

chemical composition of materials, and manufacturing methods, processes, or treatments) which:

- (1) Is not generally known or publicly available from other sources;
- (2) Has not previously been made available by the owner to others without obligation concerning its confidentiality; and
- (3) Is not already in the possession of the recipient Participant without obligation concerning its confidentiality.

It shall be the responsibility of each Participant supplying proprietary information to identify the information as such and to ensure that it is appropriately marked.

(d) *Production of Relevant Information by Governments.* The Operating Agent should encourage the governments of all Agency Participating Countries to make available or to identify to the Operating Agent all published or otherwise freely available information known to them that is relevant to the performance of the work under each Annex. The Participants in each Annex should notify the Operating Agent of all pre-existing information, and information developed independently of the Annex known to them which is relevant to the Annex and which can be made available without contractual or legal limitations.

(e) *Production of Available Information by Participants.* Each Participant in an Annex agrees to provide to the Operating Agent all previously existing information and information developed independently of the Annex which is needed by the Operating Agent to carry out its functions in that Annex, which is freely at the disposal of the Participant, and the transmission of which is not subject to any contractual and/or legal limitations:

- (1) If no substantial cost is incurred by the Participant in making such information available, at no charge to the Annex.
- (2) If substantial costs must be incurred by the Participant to make such information available, at such charge to the Annex as shall be agreed between the Operating Agent and the Participant with the approval of the Executive Committee.

(f) *Use of Proprietary Information.* If a Participant in an Annex has access to proprietary information which would be useful to the Operating Agent in conducting studies, assessments, analyses, or evaluations, such information may be communicated to the Operating Agent in accordance with an agreement between the Operating Agent and the specific Participant setting forth the terms and conditions for such acceptance; but the proprietary information shall not become part of reports, handbooks, or other documentation, nor be communicated to the other Participants except as may be agreed in writing between the Operating Agent and the Participant which supplied such information.

(g) *Arising Proprietary Information.* It shall be the responsibility of the Operating Agent to identify information arising from each Task which qualifies as proprietary information under this Article and to ensure that it is appropriately marked. If any Contracting Party questions the decision of the Operating Agent regarding the proprietary nature of arising information, the question shall be submitted to the Executive Committee for decision. Proprietary information arising from any Task shall be the property of the Operating Agent for the benefit of the Participants in the Task. The Operating agent shall license such proprietary information for non-exclusive use as follows:

(1) To each Participant in the Task:

(i) On the most favourable terms and conditions for use by the Participant in its own country;

(ii) On favourable terms and conditions for the purpose of sub-licensing others for use in its own country.

In each case, the terms and conditions are to be stipulated by the Executive Committee taking into account the equities of the Participants based upon the sharing of obligations, contributions, rights and benefits of all Participants.

(2) Subject to sub-paragraph (1) above, to each Participant in the Task for use in all countries, on reasonable terms and conditions stipulated by the Executive Committee taking into account the equities of the Participants based upon the sharing of obligations, contributions, rights and benefits of all Participants;

(3) To the government of any Agency country and nationals designated by it, for use in such country in order to meet its energy needs, on terms and conditions stipulated by the Executive Committee taking into account any equitable conditions which should arise from the support provided by the Agency to the Task;

(4) To entities and persons not mentioned above in this paragraph, if agreed by the Executive Committee, on terms and conditions stipulated by the Executive Committee.

(h) *Acquisition of Information.* Each Participant in an Annex shall inform the Operating Agent of the existence of information known to the Participant that can be of value to the Annex, but which is not freely available, and the Participant shall endeavour to make the information available to the Annex under reasonable conditions.

(i) *Exchange of Information with Others.* The Executive Committee may, acting by unanimity, make arrangements for the acquisition of information from sources other than the Participants in an Annex. The Executive Committee shall, acting by unanimity, determine the rules by which information available to Participants in an Annex may be made available to governments, utilities, research institutions, and other appropriate entities of countries which do not participate in an Annex.

(j) *Reports on Work Performed.* The Operating Agent of each Annex shall provide reports on all work performed under the Annex and the results thereof, including studies, assessments, analyses, evaluations and other documentation, but excluding proprietary information, to the Participants.

(k) *Copyright.* The Operating Agent of each Annex may take appropriate measures necessary to protect copyrightable material generated under that Annex. Copyrights obtained shall be held by the Operating Agent for the benefit of the Annex Participants, in accordance with Article 5(b)2 hereof. Participants may reproduce and distribute such material, but shall not publish it with a view to profit, except as agreed by the Executive Committee, acting by unanimity.

(l) *Authors.* Each Participant shall, without prejudice to any rights of authors under its national laws, take necessary steps to provide the co-operation with its authors required to carry out the provisions of this paragraph. Each Participant will assume the responsibility to pay awards or compensation required to be paid to its employees according to the laws of its country.

(m) *Access to Information and Reports.* Participants in each Annex shall be entitled without charge to have access to the information and reports produced by the Operating Agent for the Annex. The Executive Committee shall lay down guidance as to the use any Participant may make of the information and, where appropriate, the charges to be imposed.

(m) *Effect of Termination or Withdrawal.* The Executive Committee shall, at the time of the termination of this Agreement or the withdrawal of any Contracting Party, adopt appropriate measures for the subsequent application of the obligations of paragraph (m) above and related questions, which may include guidance as to the use any previous Participant may make of the information and, where appropriate, the charges to be imposed.

Article 10

LEGAL RESPONSIBILITY AND INSURANCE

(a) *Liability of the Operating Agent.* The Operating Agent shall use all reasonable skill and care in carrying out its duties under this Agreement in accordance with all applicable laws and regulations. Except as otherwise provided in this Article, the cost of all damage to property, and all expenses associated with claims, actions, and other costs arising from work approved by the Executive Committee and undertaken with common funds for a Task shall be charged to the Budget of that Task; such costs and expenses arising from other work undertaken for a Task shall be charged to the Budget of that Task if the Task Annex so provides or the Executive Committee, acting by unanimity, so decides.

(b) *Insurance.* The Operating Agent shall propose to the Executive Committee all necessary liability, fire and other insurance, and shall carry such insurance as the Executive Committee may direct. The cost of obtaining and maintaining insurance shall be charged to the Budget of the Task.

(c) *Responsibility of the Operating Agent.* The Operating Agent shall, in accordance with the laws of the country of the Operating Agent, be responsible in its capacity as such, for any damage to property and all legal liabilities, actions, claims, costs and expenses connected therewith to the extent that they:

- (1) Result from the failure of the Operating Agent to maintain such insurance as it may be required to maintain under paragraph (b) above; or
- (2) Result from the gross negligence or wilful misconduct of any officers or employees of the Operating Agent in carrying out their duties under this Agreement.

Article 11

LEGISLATIVE PROVISIONS

(a) *Accomplishment of Formalities.* Each Participant shall request the appropriate authorities of its country (or its Member States in the case of an international organization) to use their best endeavours, within the framework of applicable legislation, to facilitate the accomplishment of formalities involved in the movement of persons, the importation of materials and equipment and the transfer of currency which shall be required to conduct the Task in which it is engaged.

(b) *Appropriation of Funds and Applicable Laws.* In carrying out this Agreement and its Annexes the Contracting Parties shall be subject to the appropriation of funds by the appropriate governmental authority, where necessary, and to the constitutions, laws and regulations applicable to the respective Contracting Parties, including, but not limited to, laws establishing prohibitions upon the payment of commissions, percentages, brokerage or contingent fees to persons retained to solicit governmental contracts and upon any share of such contracts accruing to governmental officials.

(c) *Decisions of Agency Governing Board.* Participants in the various Tasks shall take account, as appropriate, of the Guiding Principles for Co-operation in the Field of Energy Research and Development, and any modification thereof, as well as other decisions of the Governing Board of the Agency in that field. The termination of the Guiding Principles shall not affect this Agreement, which shall remain in force in accordance with the terms hereof.

(d) *Settlement of Disputes.* Any dispute among the Contracting Parties concerning the interpretation or the application of this Agreement which is not settled by negotiation or other agreed mode of settlement shall be referred to a tribunal of three arbitrators to be chosen by

the Contracting Parties concerned who shall also choose the Chairman of the tribunal. Should the Contracting Parties concerned fail to agree upon the composition of the tribunal or the selection of its Chairman, the President of the International Court of Justice shall, at the request of any of the Contracting Parties concerned, exercise those responsibilities. The tribunal shall decide any such dispute by reference to the terms of this Agreement and any applicable laws and regulations, and its decision on a question of fact shall be final and binding on the Contracting Parties concerned. Operating Agents which are not Contracting Parties shall be regarded as Contracting Parties for the purpose of this paragraph.

Article 12

ADMISSION AND WITHDRAWAL OF CONTRACTING AND ASSOCIATE CONTRACTING PARTIES

(a) *Admission of New Contracting Parties: OECD Countries.* Subject to Article 14(a) below, upon the invitation of the Executive Committee, acting by unanimity, admission to this Agreement shall be open after 15th November, 1993 to the government of any Agency Participating Country (or a national agency, public organization, private corporation, company or other entity designated by such government), which signs or accedes to this Agreement, accepts the rights and obligations of a Contracting Party, and is accepted for participation in at least one Task by the Participants in that Task, acting by unanimity. Such admission of a Contracting Party shall become effective upon the signature of this Agreement by the new Contracting Party or its accession thereto and its giving Notice of Participation in one or more Annexes and the adoption of any consequential amendments thereto. Upon invitation of the Governing Board of the Agency, admission to this Agreement shall be open also to the government of any Member country of the Organisation for Economic Co-operation and Development (OECD) which does not participate in the Agency (or a national agency, public organization, private corporation, company or other entity designated by such government), under the conditions stated above.

(b) *Admission of Associate Contracting Parties.* The government of any country which does not participate in the OECD, or any international organization in which one or more such governments participate, may, on the proposal of the Executive Committee, acting by unanimity, be invited by the Governing Board of the Agency to become an Associate Contracting Party to this Agreement (or to designate a national agency, public organization, private corporation, company or other entity to do so). The terms, conditions and duration shall be agreed in each case between the Contracting Parties and the Associate Contracting Party on an equitable basis in relation to the sharing of obligations, contributions, rights and benefits, as provided for in the Guiding Principles for Co-operation in the Field of Energy Research and Development, approved by the Governing Board of the Agency on 9th December, 1991 [IEA/GB(91)79] and any modification thereof.

(c) *Participation by the European Communities.* The European Communities may participate in this Agreement as a Contracting Party in accordance with arrangements to be made by the Executive Committee, acting by unanimity.

(d) *Admission of New Participants in Tasks.* Any Contracting Party may, with the agreement of the Participants in a Task, acting by unanimity, become a Participant in that Task. Such participation shall become effective upon the Contracting Party's giving the Executive Director of the Agency a Notice of Participation in the appropriate Task Annex and the adoption of consequential amendments thereto.

(e) *Contributions.* The Executive Committee may require, as a condition to admission to participation, that the new Contracting Party or new Participant shall contribute (in the form of cash, services, materials or intellectual property) an appropriate proportion of the prior budget expenditure of any Task in which it participates.

(f) *Replacement of Contracting Parties.* With the agreement of the Executive Committee, acting by unanimity, and upon the request of a government, a Contracting Party designated by that government may be replaced by another party. In the event of such replacement, the replacement party shall assume the rights and obligations of a Contracting Party as provided in paragraph (a) above and in accordance with the procedure provided therein.

(g) *Withdrawal.* Any Contracting Party may withdraw from this Agreement or from any Task either with the agreement of the Executive Committee, acting by unanimity, or by giving twelve months written Notice of Withdrawal to the Executive Director of the Agency, such notice to be given not less than one year after the date hereof. The withdrawal of a Contracting Party under this paragraph shall not affect the rights and obligations of the other Contracting Parties; except that, where the other Contracting Parties have contributed to common funds for a Task, their proportionate shares in the Task Budget shall be adjusted to take account of such withdrawal. Furthermore, in any Annex with an identified pilot phase to explore the feasibility and precise nature of further work under the Annex, any Participant may withdraw from such Annex by giving a written Notice of Withdrawal to the Executive Director of the Agency upon termination of its pilot phase.

(h) *Changes of Status of Contracting Party.* A Contracting Party other than a government or an international organization shall forthwith notify the Executive Committee of any significant change in its status or ownership, or of its becoming bankrupt or entering into liquidation. The Executive Committee shall determine whether any such change in status of a Contracting Party significantly affects the interests of the other Contracting Parties; if the Executive Committee so determines, then, unless the Executive Committee, acting upon the unanimous decision of the other Contracting Parties, otherwise agrees:

- (1) That Contracting Party shall be deemed to have withdrawn from the Agreement under paragraph (g) above on a date to be fixed by the Executive Committee; and
- (2) The Executive Committee shall invite the Government which designated that Contracting Party to designate, within a period of three months of the withdrawal of that Contracting Party, a different entity to become a Contracting Party; if approved by the Executive Committee, acting by unanimity, such entity shall become a Contracting Party with effect from the date on which it signs or accedes to this Agreement and gives the Executive Director of the Agency a Notice of Participation in one or more Annexes.

(i) *Failure to Fulfil Contractual Obligations.* Any Contracting Party which fails to fulfil its obligations under this Agreement within sixty days after its receipt of notice, specifying the nature of such failure and invoking this paragraph, may be deemed by the Executive Committee, acting by unanimity, to have withdrawn from this Agreement.

Article 13

SPONSORS

The Executive Committee may in exceptional cases and with the approval of the Committee on Energy Research and Technology (CERT) of the Agency invite any entity of an OECD Member country that is not designated by that country to participate in the Agreement, or any non-intergovernmental international entity in which one or more entities of OECD Member countries participate, to participate in the Programme as "Sponsors" in accordance with the following paragraphs:

- (1) The Executive Committee, acting by unanimity, shall submit to the CERT for approval a proposal with regard to the terms and conditions (including duration) of participation of a Sponsor, on an equitable basis in relation to the sharing of obligations, contributions, rights and benefits. Such a proposal may provide for the Sponsor to exercise the rights and undertake the duties of a Contracting Party on such matters as representation on the Executive Committee and other bodies or in workshops established under the Programme, financial contributions, staff secondment, intellectual property, voting arrangements, sharing in the liquidation of assets, termination, and withdrawal. The proposal shall lay down which provisions of this Agreement referring to "Contracting Party", "Contracting Parties", "Participant" and/or "Participants" would also apply for the Sponsor. The CERT may expressly condition its approval, in which case the Executive Committee shall either adopt such conditions, acting by unanimity, or elect not to invite that entity as a Sponsor. Any amendment to the approved terms and conditions shall be subject to the same approval procedures.
- (2) Before submitting to the CERT a proposal for participation as Sponsor by an entity of an OECD country, the Executive Committee shall send the proposal to the CERT Delegate of that OECD Member country where the entity indicates it has its principal place of business (or, as the case may be, conducts its principal activity), specifying a reasonable period, which may be determined by the CERT, within which the CERT Delegate may object to the submission of the proposal to the CERT. If the CERT Delegate objects within that period, the Executive Committee shall not submit the proposal to the CERT.
- (3) The terms and conditions (including duration) of participation of a Sponsor, or any amendment thereto, shall enter into force upon (i) the adoption by the Executive Committee, acting by unanimity, (ii) approval by the CERT, and

(iii) acceptance by the Sponsor, in a letter addressed to the Executive Director of the Agency.

- (4) In the event that the Executive Committee amends the Agreement so as to impose additional obligations on Contracting Parties or Participants, the Executive Committee shall decide, acting by unanimity, whether or to what extent such additional obligations shall be imposed on the Sponsor. In such cases the Sponsor shall notify the Executive Committee of its acceptance of the amendments within three months or such other period as may be fixed by the Executive Committee, failing which it shall be deemed to have withdrawn from participation in the Agreement.

Article 14

FINAL PROVISIONS

(a) *Initial Signature Period.* This Agreement shall be open for signature until 15th November, 1993, by any Agency Participating Country (or a national agency, public organization, private corporation, company or other entity designated by such government).

(b) *Term of Agreement.* This Agreement shall enter into force upon signature by two or more Contracting Parties and shall remain in force for an initial period of five years. The term of the Agreement may be extended for such additional periods as may be determined by the Executive Committee, acting by unanimity, with the prior approval of the Governing Board of the Agency. The Executive Committee may, acting by unanimity, terminate this Agreement at any time.

(c) *Legal Relationship of Contracting Parties and Participants.* Nothing in this Agreement shall be regarded as constituting a partnership between any of the Contracting Parties or Participants.

(d) *Termination.* Upon termination of this Agreement, or any Annex to this Agreement, the Executive Committee, acting by unanimity, shall arrange for the liquidation of the assets of the Task or Tasks. In the event of such liquidation, the Executive Committee shall, so far as practicable, distribute the assets of the Task, or the proceeds therefrom, in proportion to the contributions which the Participants have made from the beginning of the operation of the Task, and for that purpose shall take into account the contributions and any outstanding obligations of former Contracting Parties. Disputes with a former Contracting Party about the proportion allocated to it under this paragraph shall be settled under Article 11(d) hereof, for which purpose a former Contracting Party shall be regarded as a Contracting Party.

(e) *Amendment.* This Agreement may be amended at any time by the Executive Committee, acting by unanimity, and any Annex to this Agreement may be amended at any time by the Executive Committee, acting by unanimity of the Participants in the Task to

which the Annex refers. Such amendments shall come into force in a manner determined by the Executive Committee, acting under the voting rule applicable to the decision to adopt the amendment.

(f) *Deposit.* The original of this Agreement shall be deposited with the Executive Director of the Agency and a certified copy thereof shall be furnished to each Contracting Party and to the Operating Agents. A copy of this Agreement shall be furnished to each Agency Participating Country, to each Member country of the Organisation for Economic Co-operation and Development and to the European Communities.

Done in Paris, this 28th day of September, 1993.

For the ENERGY RESEARCH AND
DEVELOPMENT CORPORATION* (ERDC)
(designated by the Government of Australia):

P. Harrington

For the VERBAND DER ELEKTRIZITÄTSWERKE
ÖSTERREICHS (VEÖ)
(designated by the Government of Austria):

Ulrike Unterer

For THE MINISTRY OF ENERGY, DANISH ENERGY AGENCY
for and on behalf of the Government of Denmark:

Ture Falbe-Hansen

For the MINISTRY OF TRADE AND INDUSTRY**
for and on behalf of the Government of Finland:

Martti Mäenpää

Pour le MINISTÈRE DE L'INDUSTRIE, DES POSTES
ET TÉLÉCOMMUNICATIONS ET DU COMMERCE EXTÉRIEUR
for and on behalf of the Government of France:

Cabana

For ENEL SpA
(designated by the Government of Italy):

Leonardo Marzio
Giovanni Cuttica

For THE NEW ENERGY AND INDUSTRIAL
TECHNOLOGY DEVELOPMENT ORGANIZATION (NEDO)
(designated by the Government of Japan):

T. Kidahashi

For THE MINISTRY OF TRADE, INDUSTRY AND ENERGY
of the Republic of Korea***:

Duck Young Joo

* The ENERGY RESEARCH AND DEVELOPMENT CORPORATION acts as the Australian Contracting Party on behalf of a consortium of Australian organizations. The consortium includes the following organizations: the Energy Research and Development Corporation, the Electricity Supply Association of Australia, Australian Capital Territory Electricity and Water, CitiPower, the Electricity Trust of South Australia, the Hydro-electric Commission of Tasmania, Illawarra Electricity, Northern Rivers Electricity, Pacific Power, the Queensland Transmission and Supply Corporation, the Snowy Mountains Hydro-electric Authority, the South-east Queensland Electricity Board, Sydney Electricity, Western Power Corporation.

** The TECHNOLOGY DEVELOPMENT CENTRE (TEKES) has replaced the Ministry of Trade and Industry as the Finnish Contracting Party.

*** The Korean Ministry of Trade, Industry and Energy participates in the Agreement as an Associate Contracting Party, as provided in the Guiding Principles for Co-operation in the Field of Energy Research and Development of the Agency, under terms and conditions provided in decisions of the Executive Committee.

For the NETHERLANDS AGENCY FOR
ENERGY AND THE ENVIRONMENT (NOVEM)
(designated by the Government of the Netherlands):

P. van Luyt

For the NORWEGIAN WATER RESOURCES
AND ENERGY ADMINISTRATION (NVE)
(designated by the Government of Norway):

Bjørn Barth

For the MINISTRY OF INDUSTRY AND ENERGY
for and on behalf of the Government of Spain:

Luis Atienza

For the SWEDISH NATIONAL BOARD FOR INDUSTRIAL
AND TECHNICAL DEVELOPMENT (NUTEK)
(designated by the Government of Sweden):

Mats Isaksson

For the SWISS FEDERAL OFFICE OF ENERGY
for and on behalf of the Government of Switzerland:

E. Roethlisberger

For the DEPARTMENT OF TRADE AND INDUSTRY
for and on behalf of the Government of the
United Kingdom of Great Britain and Northern Ireland:

K. G. MacInnes

For EA TECHNOLOGY LTD.
(designated by the Government of the United
Kingdom of Great Britain and Northern Ireland):

K. G. MacInnes

For the GOVERNMENT OF THE UNITED STATES OF AMERICA:

David Aaron

Annex I

INTERNATIONAL DATA BASE ON DEMAND-SIDE MANAGEMENT TECHNOLOGIES AND PROGRAMMES

1. *Objective*

The objective of this Task is to establish an international data base on demand-side management programmes, analyze the data collected, and disseminate the information which results from the analysis. These activities should help utilities and governments in Participants' countries to design demand-side management (DSM) programmes which reach more customers and save more energy at lower cost.

2. *Means*

In order to accomplish the foregoing objective, Participants will carry out the following Subtasks:

(a) Subtask I/1 Pilot Project to Explore the Feasibility and Nature of an International Data Base on DSM Programmes

Participants will assess the transferability of DSM programme results, the usefulness of existing data collection instruments and data bases on DSM programmes, and the level of interest among potential users of an international data base on DSM programmes. Participants will review existing DSM programme data bases and reports, conduct case studies on three to five DSM programmes in each Participant's country, enter programme information into data collection instruments, translate the data collection instruments into different countries' languages (at their option), and identify and contact potential users of an international DSM programme data base.

(b) Subtask I/2 Identification of DSM Programmes for the Data Base

Participants will identify candidate DSM programmes for inclusion in an international data base on DSM programmes and will obtain brief descriptors of energy efficiency programmes being implemented in each Participant's country. To do so, they will develop a questionnaire, identify a representative sample of utilities with DSM programmes, distribute the questionnaire to the sample, collect responses to the questionnaire, and analyze the responses.

(c) Subtask I/3 Design of International Data Base on DSM Programmes

Participants will develop data collection instruments, glossary of terms, and data base software for implementing an international data base on DSM

programmes, in order to ensure that the terms, units and measurements are highly similar or identical. The Operating Agent will conduct quality control site visits to ensure that the data collection instruments and data base software are used in a consistent fashion in all of the Participants' countries.

(d) Subtask I/4 Collection and Entry of Data on DSM Programmes

Participants will collect data on energy efficiency programmes using the data collection instruments and software developed in Subtask I/3 and will create a repository for the data collected. In particular, they will distribute a survey, collect survey responses, conduct a quality review of the responses, and enter the responses into an international data base on DSM programmes. To ensure accuracy, the data base will focus as much as possible on those programmes with measured data, though some key programmes with estimated data on energy savings, costs, and market penetration will also be included. Data collected on each programme are to include at least the following items:

- (1) Name of the sponsoring utility or government agency;
- (2) Name and type of the programme;
- (3) End-use markets covered;
- (4) Programme objectives and approach;
- (5) Energy efficiency measures being promoted and incentives being used;
- (6) Depiction of the programme as a pilot or full-scale effort;
- (7) Starting and finishing dates for the programme and the information;
- (8) Numbers of customers eligible and participating;
- (9) Number of completed projects;
- (10) Estimated power (megawatt) and energy (kilowatt-hour) savings;
- (11) Adjustments included in savings estimates;
- (12) Utility or local peak demand for the most recent years;
- (13) Direct and indirect programme costs (e.g. for consumer incentives);
- (14) Participant costs;
- (15) Equipment lifetimes;
- (16) Measurement methodologies and evaluation studies;
- (17) Related programmes;
- (18) Names, addresses, and telephone and telefax numbers of contacts.

(e) Subtask I/5 Analysis and Dissemination of DSM Programme Information

Participants will analyze information collected in the international data base on DSM programmes, prepare reports on lessons learned, and publish the reports to transfer knowledge gained within their countries. The reports will compare alternative programme approaches in Participants' countries, in order to arrive at common judgements as to which approaches are most effective, which can be improved, and which are best avoided.

(f) Subtask I/6 Updating of International DSM Programme Data Base

After the initial data collection, Participants will undertake annual updates of the data base to ensure that the data on new and existing programmes remain current. Updates will cover all data items enumerated in Subtask I/4.

(g) Subtask I/7 Promotion of International DSM Programme Data Base

Participants will promote the international DSM programme data base project on a regular basis throughout the Task, in order to ensure that it is a current and useful resource. Literature describing the data base to potential users will be prepared, and the Operating Agent will work with users to help ensure that the data base is user-friendly.

3. *Results*

Results of this Task will include:

- (a) A report on the Pilot Project pursuant to Subtask I/1 as described in sub-paragraph 2(a) above, outlining the nature of an international data base on DSM programmes;
- (b) An international data base on DSM programmes, pursuant to Subtasks I/2, I/3, and I/4 as described in sub-paragraphs 2(b), (c) and (d) above;
- (c) Reports on demand-side management programmes and programme approaches, pursuant to Subtask I/5 as described in sub-paragraph 2(e) above;
- (d) Updates to the data base, pursuant to Subtask I/6 as described in sub-paragraph 2(f) above;
- (e) Promotional materials on the data base, pursuant to Subtask I/7 as described in sub-paragraph 2(g) above;
- (f) Annual reports on progress towards sub-paragraphs (b), (c), (d), and (e) above.

4. *Time Schedule*

This Annex shall remain in force for five years, the first of which shall be a pilot phase. It may be extended by agreement of two or more Participants, acting in the Executive

Committee, taking into account any recommendation of the Agency's Committee on Energy Research and Technology concerning the term of this Annex, and shall thereafter apply only to those Participants*.

5. *Specific Responsibilities of the Operating Agent*

In addition to carrying out the specific responsibilities enumerated in Article 5 of this Agreement, the Operating Agent shall:

- (a) Establish and maintain an international data base on DSM programmes and manage the first-year Pilot Project to determine the scope and nature;
- (b) Conduct workshops to provide Participants with a consistent understanding of the information to be collected for the data base;
- (c) Provide quality control for the data base through frequent communication and periodic site visits with Participants;
- (d) Analyze programme data and disseminate DSM programme information;
- (e) Co-ordinate the data collection and analysis activities of Participants;
- (f) Prepare, review, revise, and distribute to Participants the reports specified in sub-paragraphs 3(b) and (c) above, pursuant to Subtask I/1 and I/2;
- (g) Promote the long-term viability of an international data base on DSM programmes.

6. *Funding*

- (a) *Common Fund.* A Common Fund shall be established by the Executive Committee and shall be included in the Annual Programme of Work and Budget for the purpose of funding the obligations of the Operating Agent under this Annex.
- (b) *Task Costs.* The overall five-year Budget of the Operating Agent for carrying out the management of the Annex is set at US \$1,930,000 at January, 1993 prices. Of this amount, estimated expenditure for the pilot phase of the Annex,

* This Annex entered into force on 28th October, 1993 pursuant to a decision by the Executive Committee in accordance with Article 2(d) of this Agreement.

lasting for the first year that the Annex is in effect, is US \$140,000. Estimated expenditure in subsequent years is US \$450,000 per annum. If significant changes in price levels or the scope of activities under the Annex occur, the Executive Committee, acting by unanimity of the Participants, shall consider whether to adjust the Programme of Work to the available funds or increase the Budget.

- (c) *Sharing of Task Costs.* The Budget shall generally be funded by Participants through a standard contribution of five per cent of the Budget plus a pro rata contribution based on countries' percentage contributions to the Budget of the Agency, where pro rata percentages are applied to the portion of the Budget which remains to be funded after the standard contributions are made. The Commission of the European Communities (CEC) will make a standard contribution of \$40,000 to the Budget each year. However, this formula may be modified by the Executive Committee, acting by unanimity of the Participants in the Task. The contributions of Associate Contracting Parties shall be determined by the Executive Committee, acting by unanimity of the Participants in this Annex.
- (d) *Changes in Number of Participants.* If the number of Participants changes, the shares of contributions to the costs will be adjusted accordingly by the Executive Committee, acting by unanimity of the Participants. New Participants shall pay the full share of the costs beginning with the project year in which they become Participants.
- (e) *Individual Financial Obligations.* Aside from the contributions described in sub-paragraph (c) above, each Participant shall bear all the costs it incurs in carrying out its obligations under the Annex, including the costs of collecting data on DSM programmes in its country.
- (f) *Task-Sharing Requirements.* The expected contribution of each Participant to task-sharing under the Annex is 2 person-months of effort during the first year that the Annex is in force and 6 to 12 person-months of effort during each additional year that the Annex remains in force.
- (g) *Withdrawal.* As specified in Article 12(g) of this Agreement, Participants in this Annex may withdraw by giving written Notice of Withdrawal to the Executive Director of the Agency upon termination of the pilot phase embodied in Subtask I/1.

7. *Operating Agent*

Lawrence Berkeley Laboratories (LBL), United States of America, is designated as Operating Agent.

8. *Participants in this Task*

The Contracting Parties which are Participants in this Task are the following:

The Verband der Elektrizitätswerke Österreichs (VEÖ) (Austria),
The Ministry of Energy, Danish Energy Agency,
The Ministry of Trade, Industry and Energy (Korea) *,
The Netherlands Agency for Energy and the Environment (NOVEM),
The Ministry of Industry and Energy (Spain),
The Swedish National Board for Industrial and Technical Development (NUTEK),
The Government of the United States of America.

* See footnote p. 28.

Annex II

COMMUNICATIONS TECHNOLOGIES FOR DEMAND-SIDE MANAGEMENT

1. *Objective*

The objective of this Task is to assess the best available options for applying communications technologies to demand-side management (DSM) programmes in the Participants' countries, and to specify the research, development and demonstration efforts which are required to bring these options to fruition. The range of communications technologies to be considered includes options for load control, data transmission, data processing, load management, advanced metering, automated meter reading and billing, customer interface services, and automation for improving distribution quality and system security. The main criteria for evaluating these technologies will be their potential to improve the efficiency of energy resource use and to provide customers with better service at lower cost. Due regard will also be given to their potential for integration into services for other energy systems, particularly district heating schemes, and utility services generally.

2. *Means*

In order to accomplish the foregoing objective, Participants will carry out the following Subtasks:

(a) Subtask II/1 Assessment of Communications Requirements for Utilities and for Different Classes of Utility Customers

Participants will survey the particular communications needs of utilities and their customers, distinguishing between different types of residential, commercial, and industrial energy users. The needs to be considered shall include at least the following:

- (1) Provision of tariff information to customers;
- (2) Adjustment of demand to time-variant tariffs;
- (3) Automated control of appliances and machinery;
- (4) Remote meter reading and automatic billing;
- (5) Improved phase and voltage monitoring of the electric grid;
- (6) Quicker isolation of system faults;
- (7) Collection of system load data for planning purposes;
- (8) Provision of information on weather and road conditions;
- (9) Control of street lighting and other public services.

(b) Subtask II/2 Assessment of Communications Technology Options in Various Demand-Side Management Programme Contexts

Participants will collect and collate national data on the application of communications technologies in meeting specific DSM performance criteria, following a format developed by the Operating Agent. In doing so, Participants will correlate different communications systems adopted with the stringency of DSM performance goals to be met. Participants will also examine the potential for new technologies, now in a trial or demonstration phase, to meet various DSM performance goals. The Operating Agent will then analyze Participants' information to arrive at conclusions on the best communications options for meeting clearly defined DSM performance criteria. Aspects of communications systems to be considered include:

- (1) System parameters and methods, including the design requirements for data transmission, data processing, communications systems and protocols;
- (2) Customer interface technologies for in-house energy optimization, automatic load management, advanced metering and tariffs, and automated meter reading and billing;
- (3) Distribution control interfaces for maintaining security and quality in the electricity supply system;
- (4) Regulatory environment for communications in different Participants' countries.

(c) Subtask II/3 Assessment of Means for International Harmonization of Communications Technology Standards

Participants will describe the characteristics of the communications systems available in their countries and will list the suppliers of these systems. They will then assess the extent of system compatibility and standardization between different equipment suppliers. Based on Participants' assessments, the Operating Agent shall consider the scope for developing harmonized standards to allow system compatibility on an international scale and will make recommendations for future action.

(d) Subtask II/4 Assessment of Priorities for Research, Development and Demonstration of DSM-Related Communications Technologies

Participants will forecast the pattern and development of DSM national policy and show expected trends in the future application of communications technologies. They will then identify areas of weakness where future research, development and demonstration efforts may be directed. Based on Participants' responses, the Operating Agent shall examine R&D and demonstration priorities for communications technologies.

3. *Results*

The results of the joint activities will be:

- (a) A report describing the communications requirements of utilities and different classes of residential, commercial, and industrial customers, as surveyed under Subtask II/1 as described in sub-paragraph 2(a) above;
- (b) A report assessing the best types of communications technology for meeting different performance criteria in pursuit of demand-side management goals, pursuant to Subtask II/2 as described in sub-paragraph 2(b) above;
- (c) A report on the potential to develop harmonized standards for communications technology which would allow system compatibility across Participants' countries, with recommendations for action in pursuit of such standards, pursuant to Subtask II/3 as described in sub-paragraph 2(c) above;
- (d) A report on key priorities for research, development, and demonstration to bring emerging DSM-related communications technologies to the marketplace, pursuant to Subtask II/4 as described in sub-paragraph 2(d) above.

4. *Time Schedule*

This Annex shall remain in force for three years. It may be extended by agreement of two or more Participants, acting in the Executive Committee, taking into account any recommendation of the Agency's Committee on Energy Research and Technology concerning the term of this Annex, and shall thereafter apply only to those Participants*.

5. *Specific Responsibilities of the Operating Agent*

In addition to carrying out the specific responsibilities enumerated in Article 5 of this Agreement, the Operating Agent shall prepare, review, revise and distribute to Participants the documents and reports specified in paragraph 3 above.

* This Annex entered into force on 1st October, 1993 pursuant to a decision by the Executive Committee in accordance with Article 2(d) of this Agreement.

6. *Funding*

- (a) *Common Fund.* A Common Fund shall be established by the Executive Committee and shall be included in the Annual Programme of Work and Budget for the purpose of funding the obligations of the Operating Agent under this Annex.
- (b) *Task Costs.* The overall three-year Budget of the Operating Agent for carrying out the management of the Annex is set at US \$1,196,400 at January, 1993 prices. Of this amount, expenditure for the the first year that the Annex is in effect is estimated at US \$250,000. If significant changes in price levels or the scope of activities under the Annex occur, the Executive Committee, acting by unanimity of the Participants, shall consider whether to adjust the Programme of Work to the available funds or increase the Budget.
- (c) *Sharing of Task Costs.* The Budget shall generally be funded by Participants through a standard contribution of five per cent of the Budget plus a pro rata contribution based on countries' percentage contributions to the Budget of the Agency, where pro rata percentages are applied to the portion of the Budget which remains to be funded after the standard contributions are made. However, this formula may be modified by the Executive Committee, acting by unanimity of the Participants in the Task. The contributions of the European Communities and Associate Contracting Parties shall be determined by the Executive Committee, acting by unanimity of the Participants in this Annex.
- (d) *Changes in Number of Participants.* If the number of Participants changes, the shares of contributions to the costs will be adjusted accordingly by the Executive Committee, acting by unanimity of the Participants. New Participants shall pay the full share of the costs beginning with the project year in which they become Participants.
- (e) *Individual Financial Obligations.* Aside from the contributions described in sub-paragraph (c) above, each Participant shall bear all the costs it incurs in carrying out its obligations under the Annex.
- (f) *Task-Sharing Requirements.* The expected contribution of each Participant to task-sharing under the Annex is 5 person-months of effort during each year that the Annex remains in force.

7. *Operating Agent*

EA Technology Limited, United Kingdom, is designated as Operating Agent.

8. *Participants in this Task*

The Contracting Parties which are Participants in this Task are the following:

The Energy Research and Development Corporation* (ERDC) (Australia),
The Ministry of Trade and Industry (Finland)**,
Le Ministère de l'Industrie, des Postes et Télécommunications
et du Commerce Extérieur (France),
ENEL S.p.a. (Italy),
The New Energy and Industrial Technology Development
Organization (NEDO) (Japan),
The Netherlands Agency for Energy and the Environment (NOVEM),
The Norwegian Water Resources and Energy Administration (NVE),
The Ministry of Industry and Energy (Spain),
The Swiss Federal Office of Energy,
The Department of Trade and Industry (United Kingdom),
EA Technology Ltd. (United Kingdom).

* See footnote p. 28.

** See footnote p. 28.

Annex III

CO-OPERATIVE PROCUREMENT OF INNOVATIVE TECHNOLOGIES FOR DEMAND-SIDE MANAGEMENT

1. *Objective*

The objective of this Task is to establish a co-operative demand-pull procedure to bring more energy-efficient and environmentally-adapted demand-side management (DSM) technologies to the marketplace, to rank innovative candidate technologies for competitive procurement activities, and to conduct procurements of innovative DSM technology which has not yet reached the marketplace to demonstrate and test the procedure developed.

2. *Means*

In order to accomplish the foregoing objective, Participants will carry out the following Subtasks:

(a) Subtask III/1 Specification of a Pilot Market Acceptance Process for International Procurement of Innovative DSM Technologies

Participants will define a process for international procurement of innovative DSM technologies which involves purchasing parties from several countries. It is foreseen that this process would have several key elements:

- (1) Define a way to establish specifications for innovative DSM technologies which would satisfy a similar demand for energy efficiency in several countries yet allow for differences in equipment performance characteristics between countries, related to factors such as different climate, voltage, equipment sizes, and modes of operation;
- (2) Define a way to gather buyers of innovative DSM technologies from different countries who have sufficient purchasing power to attract the interest of manufacturers in producing such technologies, thus establishing the necessary initial demand pull;
- (3) Define a way of conducting co-operative international procurement of innovative DSM technologies which takes account of differences between countries in legal procedures for procurement;
- (4) Define a way to select among competing manufacturers in a co-operative international procurement process for innovative DSM technologies;

- (5) Define ways to provide the necessary financial support from buyers and promoting organizations to establish the initial procurement and to maintain the demand pull.

(b) Subtask III/2 Pilot Screening of Candidate DSM Technologies for an International Competitive Procurement Process

Participants will select and describe those innovative DSM technologies which would have the greatest market penetration and energy savings if an international competitive procurement process were carried out to bring them to the marketplace. The ranking of candidate technologies will focus on performance characteristics of products and the likelihood of their market penetration, depending on factors such as the following:

- (1) Interest of countries to allocate resources to buy the innovative product;
- (2) Technical development potential for the product in terms of energy savings;
- (3) Likely product performance under typical operating conditions;
- (4) Structure of supply and demand in the product markets.

Types of technologies to be considered include:

(1) Household and commercial appliances:

- (i) Refrigerators and freezers;
- (ii) Dishwashers;
- (iii) Clothes washers and dryers;
- (iv) Water heaters.

(2) Lighting equipment:

- (i) Ballasts;
- (ii) Fixtures;
- (iii) Sensors.

(3) Building components:

- (i) Windows;
- (ii) Insulation.

(4) Heating equipment:

- (i) Boilers;
- (ii) Heat pumps;
- (iii) Solar water heaters.

(5) Office equipment:

- (i) Ventilation;
- (ii) Computer screens.

(6) Industrial equipment:

- (i) Motors;
- (ii) Variable speed drives.

(c) Subtask III/3 Drafting of Detailed Specifications for a Pilot Competitive Procurement of a Selected Innovative DSM Technology

Participants will develop detailed specifications for the pilot competitive international procurement of a selected innovative DSM technology based upon the process defined in Subtask III/1, building upon existing specifications as appropriate, in order that the competitive procurement process may be tested, demonstrated, and adjusted as necessary.

(d) Subtask III/4 Market Preparation for Selected Innovative DSM Technologies

To facilitate the specification and competitive procurement of innovative DSM technologies, Participants will make contacts with key market actors, as follows:

- (1) Contact with manufacturers to give early notice of the procurement and to discuss their ability to meet the product specifications set forth;
- (2) Contact with governmental authorities and consumer organizations to discuss means of strengthening the competitive procurement operation and results;
- (3) Contact with customers and other end-use representatives to establish the necessary volume of demand to obtain the required interest and response from manufacturers.

(e) Subtask III/5 Detailed Specification and Competitive Procurement of Additional Innovative DSM Technologies

Participants will finalize detailed specifications for the competitive international procurement of additional innovative DSM technologies based upon the process defined in Subtask II/1 and will then conduct competitive international procurements based on these specifications. The specifications and procurements will take advantage of the lessons learned in testing the process in Subtask III/3 as well as in evaluating the process in Subtask III/6. Participation in actual procurement will be decided individually by each Participant since special financing will be necessary for the goods delivered.

(f) Subtask III/6 Evaluation of the Competitive Procurement Process for Innovative DSM Technology and Follow-on Activities

Based upon the results of the international competitive procurements conducted, Participants will evaluate the costs and benefits of the process developed. With the help of this evaluation, Participants may modify the process to make it more effective and may also apply lessons learned to other procurements of innovative DSM technology.

3. *Results*

The results of the joint activities will be:

- (a) A workshop and report which detail a pilot market acceptance process for International procurement of innovative DSM technologies, pursuant to Subtask III/1 as described in sub-paragraph 2(a) above;
- (b) A workshop and report which select and describe those innovative DSM technologies which would have the greatest market penetration and energy savings, pursuant to Subtask III/2 as described in sub-paragraph 2(b) above;
- (c) Workshops to develop detailed specifications for the competitive international procurement of innovative DSM technologies, pursuant to Subtasks III/3 and III/5 as described in sub-paragraphs 2(c) and 2(e) above;
- (d) Competitive international procurements for innovative DSM technologies, pursuant to Subtasks III/3 and III/5 as described in sub-paragraphs 2(c) and 2(e) above;
- (e) An improved understanding of markets for innovative DSM technologies from contacts made pursuant so Subtask III/4 as described in sub-paragraph 2(d) above;
- (f) An evaluation of international procurement for innovative DSM technologies and possible draft follow-on Annexes, pursuant to Subtask III/5 as described in sub-paragraph 2(f) above.

4. *Time Schedule*

This Annex shall remain in force for five years, the first of which shall be a pilot phase. It may be extended by agreement of two or more Participants, acting in the Executive Committee, taking into account any recommendation of the Agency's Committee on Energy

Research and Technology concerning the term of this Annex, and shall thereafter apply only to those Participants*.

5. *Specific Responsibilities of the Operating Agent*

In addition to carrying out the specific responsibilities enumerated in Article 5 of this Agreement, the Operating Agent shall prepare, review, revise, and distribute to Participants the documents and reports specified in paragraph 3 above.

6. *Funding*

- (a) *Common Fund.* A Common Fund shall be established by the Executive Committee and shall be included in the Annual Programme of Work and Budget for the purpose of funding the obligations of the Operating Agent under this Annex.
- (b) *Task Costs.* The overall five-year Budget of the Operating Agent for carrying out the management of the Annex is set at a maximum of US \$500,000 at January, 1993 prices. Of this amount, estimated expenditure for the pilot phase of the Annex, lasting for the first year that the Annex is in effect, is US \$100,000. If significant changes in price levels or the scope of activities under the Annex occur, the Executive Committee, acting by unanimity of the Participants, shall consider whether to adjust the Programme of Work to the available funds or increase the Budget.
- (c) *Sharing of Task Costs.* The Budget shall generally be funded by Participants through a standard contribution of five per cent of the Budget plus a pro rata contribution based on countries' percentage contributions to the Budget of the Agency, where pro rata percentages are applied to the portion of the Budget which remains to be funded after the standard contributions are made. However, this formula may be modified by the Executive Committee, acting by unanimity of the Participants in the Task. The contributions of the European Communities and Associate Contracting Parties shall be determined by the Executive Committee, acting by unanimity of the Participants in this Annex.
- (d) *Changes in Number of Participants.* If the number of Participants changes, the shares of contributions to the costs will be adjusted accordingly by the Executive Committee, acting by unanimity of the Participants. New Participants shall pay the full share of the costs beginning with the project year in which they become Participants.

* This Annex entered into force on 28th October, 1993 pursuant to a decision by the Executive Committee in accordance with Article 2(d) of this Agreement.

- (e) *Individual Financial Obligations.* Aside from the contributions described in sub-paragraph (c) above, each Participant shall bear all the costs it incurs in carrying out its obligations under the Annex.
- (f) *Task-Sharing Requirements.* The expected contribution of each Participant to task-sharing under the Annex is 2 to 5 person-months of effort during the first year that the Annex is in force and 1 to 3 person-months of effort during each additional year that the Annex remains in force.
- (g) *Withdrawal.* As specified in Article 12(g) of this Agreement, Participants in this Annex may withdraw by giving written Notice of Withdrawal to the Executive Director of the Agency upon termination of the pilot phase embodied in the combined activities of Subtasks III/1, III/2, and III/3.

7. *Operating Agent*

The Swedish National Board for Industrial and Technical Development (NUTEK) is designated as Operating Agent.

8. *Participants in this Task*

The Contracting Parties which are Participants in this Task are the following:

The Ministry of Energy, Danish Energy Agency,
The Ministry of Trade and Industry (Finland) *,
The Netherlands Agency for Energy and the Environment (NOVEM),
The Ministry of Industry and Energy (Spain),
The Swedish National Board for Industrial and Technical Development (NUTEK),
The Government of the United States of America.

* See footnote p. 28.

Annex IV

DEVELOPMENT OF IMPROVED METHODS FOR INTEGRATING DEMAND-SIDE OPTIONS INTO RESOURCE PLANNING

1. *Objective*

The objective of this Task is to communicate and develop improved methodologies for integrating demand-side management (DSM) options into utility resource planning and related government policies. This Task will focus on assisting utilities and governments in Participants' countries to examine and include demand-side options, on an equal basis, as alternatives or additions to conventional and non-conventional supply-side resources.

2. *Means*

In order to accomplish the foregoing objective, Participants will carry out the following Subtasks:

(a) Subtask IV/1 Review and Documentation of Utility Structure and Characteristics in Agency Member Countries

Participants will conduct a review and comparative assessment of the different utility structures and characteristics in IEA Member countries, with a view to their implications for the integration of DSM options into resource planning. Based on information provided by Participants, the Operating Agent will document the regulatory frameworks, utility structures (including the degree of vertical integration), market characteristics, pricing mechanisms, and government policies that may influence the implementation of DSM programmes. This information will be distributed to Participants and Operating Agents in all the Annexes to this Agreement.

(b) Subtask IV/2 Inventory of Available Methods for Assessing the Benefits, Costs, and Impacts of Demand-Side Options

Participants will compile information on the methods, techniques, and models being used in their respective countries by utilities and governments to address various issues related to the planning, analysis, and forecasting of the benefits, costs and impacts of DSM options. A wide range of methods, techniques and models will be surveyed in this Subtask, including those for:

- (1) Collecting data on customer needs and characteristics;
- (2) Market assessment and market penetration analysis;
- (3) Load forecasting (energy and peak, load shapes, and consumption);

- (4) Identification of DSM options;
- (5) Identification of planning criteria;
- (6) Screening of DSM options;
- (7) Assessing technical and economic DSM potential;
- (8) Estimating achievable DSM potential;
- (9) Designing DSM programmes;
- (10) Measuring and evaluating programme impacts;
- (11) Performing benefit/cost analysis;
- (12) Production costing and capacity expansion analysis of supply options;
- (13) Integration of supply and demand options;
- (14) Assessing environmental externalities.

To assure consistency, a survey instrument and a set of standardized definitions will be developed and reviewed by the Participant. The information assembled on each method, technique or model will include at least the following items:

- (1) General description and purpose;
- (2) Analytical algorithms;
- (3) Available documentation;
- (4) Data requirements and sources;
- (5) Availability of data;
- (6) Related software packages, if any;
- (7) Ownership and distribution;
- (8) Terms of availability;
- (9) List of major users;
- (10) User experience and satisfaction;
- (11) References and citations.

Participants will identify in their respective countries the major organizations involved in the development and utilization of appropriate processes, methods, techniques and models to compile the initial inventory. In succeeding years, the Participants will identify additional developments in their countries relative to the development, enhancement, or modification of the processes, methods, techniques and models used.

(c) Subtask IV/3 Preparation of Guidebook on Analytical Methodologies

Participants will review the information compiled in Subtask IV/2 to identify alternative approaches and methodologies utilized for various aspects of demand-side planning and integration of demand-side options in utility resource planning. Based on this review, a guidebook will be developed describing the alternative approaches and methodologies, and summarizing how these have been incorporated into the available models and software. In preparing this guidebook, careful attention will be devoted to recognizing the different supply characteristics, market conditions, regulatory situations, pricing and tariff structures, and government policies in different Participants' countries, and examining how the various methodologies and approaches apply to these different countries. The guidebook will include three to five case

studies from different countries documenting the successful application of some of the methods, techniques, and models identified.

(d) Subtask IV/4 Development and Recommendation of Procedures for Improved Analytical Methodologies and Models

Participants will review the results of Subtasks IV/1, IV/2 and IV/3 and will identify the need for improving the available approaches, methodologies, and models to facilitate analysis and planning of demand-side options and integration of demand-side resources into the utility resource planning process. This Subtask will be carefully co-ordinated with relevant Subtasks and activities in Annexes II and V to avoid any duplication of effort. The recommendations shall be developed taking into consideration the differences amongst Participants' countries with respect to the factors influencing DSM implementation.

(e) Subtask IV/5 Development of Guidelines for Adaptation and Application of Suitable Processes and Methods from One Country to Another

Participants will review the applicability of the processes, methods, techniques, and models for assessing DSM options across the range of conditions experienced in the different Participants' countries. They shall then develop a guidebook for the transfer of these processes, methods, techniques, and models from one country to another. In particular, this guidebook shall address issues related to differences in market conditions, supply characteristics, utility structure, regulatory environments, pricing and tariff structures, and government policies.

3. *Results*

The results of this Task shall include the following:

- (a) A report comparing utility structures and characteristics in different countries, pursuant to Subtask IV/1 as described in sub-paragraph 2(a) above;
- (b) A report describing the inventory of existing processes, models, methods and techniques for different types of applications listed in Subtask IV/2 as described in sub-paragraph 2(b) above;
- (c) A guidebook on approaches and methodologies for analysis and planning of demand-side programmes and integration of demand-side options in utility resource planning, pursuant to Subtask IV/3 as described in sub-paragraph 2(c) above;
- (d) A report providing recommendations for development of improved methods, techniques, and models, pursuant to Subtask IV/4 as described in sub-paragraph 2(d) above.

- (e) A report providing guidelines on transfer of methods, techniques, and models among Participants' countries, pursuant to work under Subtask IV/5 as described in sub-paragraph 2(e) above.

4. *Time Schedule*

This Annex shall remain in force for three years. It may be extended by agreement of two or more Participants, acting in the Executive Committee, taking into account any recommendation of the Agency's Committee on Energy Research and Technology concerning the term of this Annex, and shall thereafter apply only to those Participants*.

5. *Specific Responsibilities of the Operating Agent*

In addition to carrying out the specific responsibilities enumerated in Article 5 of this Agreement, the Operating Agent shall prepare, review, revise, and distribute to Participants the documents and reports specified in paragraph 3 above.

6. *Funding*

- (a) *Common Fund.* A Common Fund shall be established by the Executive Committee and shall be included in the Annual Programme of Work and Budget for the purpose of funding the obligations of the Operating Agent under this Annex.
- (b) *Task Costs.* The overall Budget of the Operating Agent for carrying out the management of the Annex is set at US \$900,000 at January, 1993 prices. Of this amount, expenditure for the the first year that the Annex is in effect is estimated at US \$360,000. If significant changes in price levels or the scope of activities under the Annex occur, the Executive Committee, acting by unanimity of the Participants, shall consider whether to adjust the Programme of Work to the available funds or increase the Budget.
- (c) *Sharing of Task Costs.* The Budget shall generally be funded by Participants through a standard contribution of five per cent of the Budget plus a pro rata contribution based on countries' percentage contributions to the budget of the Agency, where pro rata percentages are applied to the portion of the Budget which remains to be funded after the standard contributions are made.

* This Annex entered into force on 28th October, 1993 pursuant to a decision by the Executive Committee in accordance with Article 2(d) of this Agreement.

However, this formula may be modified by the Executive Committee, acting by unanimity of the Participants in the Task. The contributions of the European Communities and Associate Contracting Parties shall be determined by the Executive Committee, acting by unanimity of the Participants in this Annex.

- (d) *Changes in Number of Participants.* If the number of Participants changes, the shares of contributions to the costs will be adjusted accordingly by the Executive Committee, acting by unanimity of the Participants. New Participants shall pay the full share of the costs beginning with the project year in which they become Participants.
- (e) *Individual Financial Obligations.* Aside from the contributions described in sub-paragraph (c) above, each Participant shall bear all the costs it incurs in carrying out its obligations under the Annex.
- (f) *Task-Sharing Requirements.* The expected contribution of each Participant to task-sharing under the Annex is 2 person-months of effort during each year that the Annex remains in force.

7. *Operating Agent*

The Electric Power Research Institute (EPRI), United States of America, is designated as Operating Agent.

8. *Participants in this Task*

The Contracting Parties which are Participants in this Task are the following:

The Energy Research and Development Corporation* (ERDC) (Australia),
The Verband der Elektrizitätswerke Österreichs (VEÖ) (Austria),
The Ministry of Energy, Danish Energy Agency,
The Ministry of Trade and Industry (Finland)** ,
Le Ministère de l'Industrie, des Postes et Télécommunications
et du Commerce Extérieur (France),
ENEL S.p.a. (Italy),
The Ministry of Trade, Industry and Energy (Korea)*** ,
The Netherlands Agency for Energy and the Environment (NOVEM),
The Ministry of Industry and Energy (Spain),
The Swedish National Board for Industrial and Technical Development (NUTEK),
The Swiss Federal Office of Energy,
The Government of the United States of America.

* See footnote p. 28.
** See footnote p. 28.
*** See footnote p. 28.

Annex V

INVESTIGATION OF TECHNIQUES FOR IMPLEMENTATION OF DEMAND-SIDE MANAGEMENT TECHNOLOGY IN THE MARKETPLACE

1. *Objective*

The objective of this Task is to develop improved utility and government strategies for implementing demand-side management (DSM) technologies in residential, small commercial and small industrial markets. Improved strategies are assumed to depend on improved assessments of customer technology requirements, utility and government information needs, factors leading to DSM technology adoption, and the behaviour of actors on the DSM technology market.

2. *Means*

In order to accomplish the foregoing objective, Participants will carry out the following Subtasks:

- (a) Subtask V/1 Development of a Common Methodology for Implementing Demand-Side Management Technologies with Small Customers

Participants will develop a common methodology for implementing DSM technology with residential, small commercial, and small industrial customers. This methodology will model the market in basic market units with objective characteristics such as kinds of end-use equipment, cost of network equipment, family or business types, and socio-cultural values. Participants will also conduct a survey of the methods that utilities and governments in their countries have successfully used to market DSM technologies in residential, small commercial and small industrial markets.

- (b) Subtask V/2 Conduct of Pilot Programmes for Implementing Demand-Side Management Technologies with Small Customers

Based upon the methodology developed in Subtask V/1, each Participant will carry out a pilot project in his country for a particular small customer market. Each pilot project will be thoroughly documented with respect to the types of customers approached, the details of the methodology applied, and the DSM technologies introduced.

- (c) Subtask V/3 Evaluation of Pilot Programmes for Implementing Demand-Side Management Technologies with Small Customers

Participants will measure the results of the pilot programmes conducted in

Subtask V/2 and evaluate their success. Results in different countries will be compared, with similarities and differences explained in terms of factors such as market segment, regulatory framework, economic environment, and socio-cultural characteristics. Within each country, results of the pilot programme will be compared with results of previous programmes in order to document improvements realised in programme effectiveness.

3. *Results*

The results of this Task shall include the following:

- (a) A methodology for implementing DSM technologies in small customer markets, pursuant to Subtask V/1 as described in sub-paragraph 2(a) above;
- (b) Pilot programmes for effective implementation of DSM technologies in small customer markets, pursuant to Subtask V/2 as described in sub-paragraph 2(b) above;
- (c) A report comparing and evaluating pilot programme results to arrive at improved understanding of how best to implement DSM technologies with different types of small customers, pursuant to Subtask V/3 as described in sub-paragraph 2(c) above;

4. *Time Schedule*

This Annex shall remain in force for three years. It may be extended by agreement of two or more Participants, acting in the Executive Committee, taking into account any recommendation of the Agency's Committee on Energy Research and Technology concerning the term of this Annex, and shall thereafter apply only to those Participants*.

5. *Specific Responsibilities of the Operating Agent*

In addition to carrying out the specific responsibilities enumerated in Article 5 of this Agreement, the Operating Agent shall prepare, review, revise, and distribute to Participants the documents and reports specified in paragraph 3 above.

6. *Funding*

- (a) *Common Fund.* A Common Fund shall be established by the Executive Committee and shall be included in the Annual Programme of Work and Budget for the purpose of funding the obligations of the Operating Agent under this Annex.

* This Annex entered into force on 24th March, 1994 pursuant to a decision by the Executive Committee in accordance with Article 2(d) of this Agreement.

- (b) *Task Costs.* The overall three-year Budget of the Operating Agent for carrying out the management of the Annex is set 49 million Spanish pesetas (approximately US \$350,000) at January 1994 prices. Of this amount, expenditure for the the first year that the Annex is in effect is estimated at 14 million Spanish pesetas (approximately US \$100,000). If significant changes in price levels or the scope of activities under the Annex shall occur, the Executive Committee, acting by unanimity of the Participants, shall consider whether to adjust the Programme of Work to the available funds or increase the Budget.
- (c) *Sharing of Task Costs.* The Budget shall generally be funded by Participants through a standard contribution of five per cent of the Budget plus a pro rata contribution based on countries' percentage contributions to the budget of the Agency, where pro rata percentages are applied to the portion of the Budget that remains to be funded after the standard contributions are made. However, this formula may be altered by the Executive Committee, acting by unanimity of the Participants in the Task. The contributions of the European Communities and Associate Contracting Parties shall be determined by the Executive Committee, acting by unanimity of the Participants in this Annex.
- (d) *Changes in Number of Participants.* If the number of Participants changes, the shares of contributions to the costs will be adjusted accordingly by the Executive Committee, acting by unanimity of the Participants. New Participants shall pay the full share of the costs beginning with the project year in which they become Participants.
- (e) *Individual Financial Obligations.* Aside from the contributions described in sub-paragraph (c) above, each Participant shall bear all the costs it incurs in carrying out its tasks under the Annex.
- (f) *Task-Sharing Requirements.* The expected contribution of each Participant to task-sharing under the Annex will depend upon the effort required to undertake a successful pilot programme under Subtask V/2 but is expected to be between 2 and 5 person-years over the term of the project, or an average of 8 to 20 person-months of effort during each year that the Annex remains in force.

7. *Operating Agent*

Fuerzas Eléctricas de Cataluña, S.A. (FECSA) (ENDESA Group), Spain, is designated as Operating Agent.

8. *Participants in this Task*

The Contracting Parties which are Participants in this Task are the following:

The Ministry of Trade and Industry (Finland)*,

The Netherlands Agency for Energy and the Environment (NOVEM),

The Ministry of Industry and Energy (Spain).

The Swedish National Board for Industrial and Technical Development (NUTEK).

* See footnote p. 28.

The Legal Counsel of the International Energy Agency hereby certifies that the present copy conforms to the original text deposited with the Executive Director of the International Energy Agency (as amended to the date hereof, by agreement of the Contracting Parties).

Paris,

THE LEGAL COUNSEL

CRAIG BAMBERGER